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MOSER, PATTERSON & SHERIDAN L.L.P.
595 SHREWSBURY AVE, STE 100
FIRST FLOOR
SHREWSBURY, NJ 07702

EXAMINER	
DUONG, FRANK	
ART UNIT	**PAPER NUMBER**
2666	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/663,009	WEISS ET AL.	
	Examiner	Art Unit	
	Frank Duong	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,13-24,29 and 32* is/are rejected.

7)☒ Claim(s) *9-12, 25-28, 30-31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is a response to the communications dated 07/23/04. Claims 1-32 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 13-24, 29 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Kinrot (USP 6,574,193).

Regarding **claim 1**, in accordance with Kinrot reference entirety, Kinrot discloses an apparatus (20), comprising:

a plurality of encoders (22) for encoding respective sampled audio streams to produce respective encoded streams (*col. 7, lines 3-11*);

a plurality of first buffers (28), for receiving respective encoded streams and forming therefrom respective sequences of transport cells, each of said transport cells comprising a portion of said respective encoded audio stream (*col. 7, lines 12-18*), each of said first buffers having associated with it a respective first buffer utilization level (*col. 7, lines 34-35; relative fill level*); and

a second buffer (30), for receiving and forwarding to a communications channel said sequences of transport cells (col. 7, lines 18-20), said second buffer having associated with it a second buffer utilization level (Fig. 1; *set queue size according to cell rate*); wherein each of said encoders adapting (Fig. 2; element 24) an encoding fidelity level (Fig. 2; BR1 or BR2 or BR3) in response to at least one of said respective first buffer utilization level (28) and said second buffer utilization level (30) (*col. 7, lines 20-30*).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Kinrot further discloses wherein said encoders provide high fidelity encoding (BR1) in response to said second buffer utilization level being below a first threshold utilization level (MBR) (*Fig. 2 and col. 7, line 31 to col. 8, line 6*).

Regarding **claim 3**, in addition to features recited in base claim 1 (see rationales discussed above), Kinrot further discloses wherein said encoders provide medium fidelity encoding (BR2) in response to said second buffer utilization level being below a second threshold utilization level (MBR) (*Fig. 2 and col. 7, line 31 to col. 8, line 6*).

Regarding **claim 4**, in addition to features recited in base claim 3 (see rationales discussed above), Kinrot further discloses wherein said high fidelity (BR1) encoding comprises 32kbps encoding and said medium fidelity (BR2) encoding comprises 24kbps encoding (*col. 1, line 64 to col. 2, line 31 and col. 10, line 5 and thereinafter*).

Regarding **claim 5**, in addition to features recited in base claim 3 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding (BR1)

comprises 48kbps encoding and said medium fidelity encoding (BR2) comprises 32kbps encoding (*col. 1, line 64 to col. 2, line 31 and col. 10, line 5 and thereinafter*).

Regarding **claim 6**, in addition to features recited in base claim 3 (see rationales discussed above), Kinrot further discloses wherein said encoders provide high fidelity encoding (BR1) in response to said respective first buffer utilization level being below a third threshold utilization level (*see Fig. 2 and col. 10, line 5 and thereinafter*).

Regarding **claim 7**, in addition to features recited in base claim 6 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding (BR1) comprises 32kbps encoding and said medium fidelity encoding (BR2) comprises 24kbps encoding (*col. 1, line 64 to col. 2, line 31 and col. 10, line 5 and thereinafter*).

Regarding **claim 8**, in addition to features recited in base claim 6 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding (BR1) comprises 48kbps encoding and said medium fidelity encoding (BR2) comprises 32kbps encoding (*col. 1, line 64 to col. 2, line 31 and col. 10, line 5 and thereinafter*).

Regarding **claim 13**, in addition to features recited in base claim 3 (see rationales discussed above), Kinrot further discloses wherein said transport cells comprise asynchronous transfer mode (ATM) cells (*col. 1, line 11 and thereinafter*).

Regarding **claim 14**, in addition to features recited in base claim 3 (see rationales discussed above), Kinrot further discloses wherein a communication channel comprises a T1 communication channel (*output of element 37 shown connected to Network. Thus, Network inherently encompasses the claimed limitation because it includes every possible communication channels to include T1*), said first threshold level

comprises 54 cells and said second threshold level comprises 65 cells (*col. 7, line 54 to col. 8, line 6*).

Regarding **claim 15**, in addition to features recited in base claim 3 (see rationales discussed above), Kinrot further discloses wherein said cells comprise Internet Protocol (IP) packets (*col. 7, line 12*).

Regarding **claim 16**, in accordance with Kinrot reference entirety, Kinrot discloses an encoding method (20), comprising the steps of:

encoding (22), using respective encoders, each of a plurality of sampled audio streams to produce respective encoded streams (*col. 7, lines 3-11*);

storing (28) each of said encoded streams in a respective first buffer, each of said first buffers having associated with it a respective first buffer utilization level (*col. 7, lines 12-18*);

forming (28), for each of said stored encoded streams, a respective sequence of transport cells (output of 28), each of said transport cells comprising a portion of said respective stored encoded stream (col. 7, lines 18-20);

coupling (output of 28 into 30) said formed transport cell sequences to a communications channel (Network) via a second buffer (30), said second buffer having associated with it a second buffer utilization level (*col. 7, lines 34-35; relative fill level*); and

adapting (32) an encoding fidelity level (BR1, Br2 or Br3) of each of said encoders in response to at least one of said respective first buffer utilization level and said second buffer utilization level (*Fig. 2, col. 7, line 31 to col. 8, line 6*).

Regarding **claim 17**, in addition to features recited in base claim 16 (see rationales discussed above), Kinrot further discloses wherein said encoders provide high fidelity encoding in response to said second buffer utilization level being below a first threshold utilization level (*Fig. 2 and col. 7, line 31 to col. 8, line 6*).

Regarding **claim 18**, in addition to features recited in base claim 16 (see rationales discussed above), Kinrot further discloses wherein said encoders provide medium fidelity encoding in response to said second buffer utilization level being below a second threshold utilization level (*col. 7, line 31 to col. 8, line 6*).

Regarding **claim 19**, in addition to features recited in base claim 18 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding comprises 32kbps encoding and said medium fidelity encoding comprises 24kbps encoding (*col. 7, line 31 to col. 8, line 6 and col. 10 and thereinafter*).

Regarding **claim 20**, in addition to features recited in base claim 18 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding comprises 48kbps encoding and said medium fidelity encoding comprises 32kbps encoding (*col. 7, line 31 to col. 8, line 6 and col. 10 and thereinafter*).

Regarding **claim 21**, in addition to features recited in base claim 18 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding comprises 24kbps encoding and said medium fidelity encoding comprises 16kbps encoding (*col. 7, line 31 to col. 8, line 6 and col. 10 and thereinafter*).

Regarding **claim 22**, in addition to features recited in base claim 18 (see rationales discussed above), Kinrot further discloses wherein said encoders provide

high fidelity encoding in response to said respective first buffer utilization level being below a third threshold utilization level (*col. 7, line 31 to col. 8, line 6 and col. 10 and thereinafter*).

Regarding **claim 23**, in addition to features recited in base claim 21 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding comprises 32kbps encoding and said medium fidelity encoding comprises 24kbps encoding (*col. 7, line 31 to col. 8, line 6 and col. 10 and thereinafter*).

Regarding **claim 24**, in addition to features recited in base claim 21 (see rationales discussed above), Kinrot further discloses wherein said high fidelity encoding comprises 48kbps encoding and said medium fidelity encoding comprises 32kbps encoding (*col. 7, line 31 to col. 8, line 6 and col. 10 and thereinafter*).

Regarding **claim 29**, in addition to features recited in base claim 16 (see rationales discussed above), Kinrot further discloses wherein said transport cells comprise asynchronous transfer mode (ATM) cells (*col. 1, line 11 and thereinafter*).

Regarding **claim 32**, in accordance with Kinrot reference entirety, Kinrot discloses a computer readable medium having computer executable instructions for causing a computer device performing steps comprising:

encoding (22), using respective encoders, each of a plurality of sampled audio streams to produce respective encoded streams (*col. 7, lines 3-11*);

storing (28) each of said encoded streams in a respective first buffer, each of said first buffers having associated with it a respective first buffer utilization level (*col. 7, lines 12-18*);

forming (28), for each of said stored encoded streams, a respective sequence of transport cells (output of 28), each of said transport cells comprising a portion of said respective stored encoded stream (col. 7, lines 18-20);

coupling (output of 28 into 30) said formed transport cell sequences to a communications channel (Network) via a second buffer (30), said second buffer having associated with it a second buffer utilization level (*col. 7, lines 34-35; relative fill level*); and

adapting (32) an encoding fidelity level (BR1, Br2 or Br3) of each of said encoders in response to at least one of said respective first buffer utilization level and said second buffer utilization level (*Fig. 2, col. 7, line 31 to col. 8, line 6*).

Allowable Subject Matter

3. Claims 9-12, 25-28 and 30-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, considered individually or in combination, fails to fairly shown or suggest the claimed invention of base claims 1 and 16 and further limit with the novel limitation of "*wherein said encoders provide high fidelity encoding to produce respective encoded streams including high, medium and low priority bits, said low and medium priority bits being removed from said transport cells in response to said second buffer utilization level being below a first threshold utilization level*" and "*wherein said*

encoders provide high fidelity encoding to produce respective encoded streams including high, medium and low priority bits, said low priority bits being removed from said transport cells in response to said second buffer utilization level being below a second threshold utilization level", structurally and functionally interconnected with other limitations in a manner as recited in the dependent claims 9-12, 25-28 and 30-31.

Response to Arguments

4. Applicants' arguments filed 07/23/04 have been fully considered but they are not persuasive. Applicants' arguments will be addressed hereinbelow in the order in which they appear in the response filed 07/23/04.

In the Remarks of the outstanding response, on page 9 and thereinafter, pertaining the rejection of claim 1-8, 13-24, 29 and 32 under U.S.C. §102(e) as being anticipated by Kinrot (USP6,574,193), Applicants argue Kinrot fails to teach or suggest the limitation of "*a second buffer, for receiving and forwarding to a communications channel said sequences of transport cells, said second buffer having associated with it a second buffer utilization level*". To support the argument, the Applicants analyze the Kinrot reference and come to a conclusion that "*Nowhere in Kinrot is there any teaching, showing, or suggesting of monitoring an input data rate of the ATM multiplexer*". Applicants also refer the Examiner back to the Applicants' specification and state "*A buffer utilization level, as disclosed in Applicants' invention, corresponds to the relative fill level of a buffer, which is determined using a combination of the output data rate from the buffer, as well as the input data rate to the buffer*".

In response, Examiner respectfully disagrees for the following rationales:

First, Examiner regrets the Applicants disagree with the Examiner's interpretation of the Kinrot's ATM multiplexer to correspond to the Applicants' claimed limitation of "*a second buffer, for receiving and forwarding to a communications channel said sequences of transport cells, said second buffer having associated with it a second buffer utilization level*". However, in examining the claimed invention Examiner has given the claimed limitation the broadest reasonable interpretation in consistent with the specification due to there is no specific definition for the claimed limitation in the claim or the specification.

Second, after a careful review of the claims Examiner finds no such language as "*monitoring an input data rate of the ATM multiplexer*". Perhaps Applicants refer to certain features that are disclosed in the present application but not recited in the rejected claims in making the contention that the Kinrot reference fails to show certain feature of Applicants' invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).*

Third, as for the "*A buffer utilization level, as disclosed in Applicants' invention, corresponds to the relative fill level of a buffer, which is determined using a combination of the output data rate from the buffer, as well as the input data rate to the buffer*", Examiner asserts again Applicants argue based on the limitation disclosed in the specification, not in the claims. Applicants are challenged to incorporate such statement into the claims to place the application in a favorable condition for allowance.

Examiner believes an earnest attempt has been made in addressing all of the Applicants' arguments. Due to the arguments are not persuasive and the amendment fails to place the application in a better form for allowance, the rejection is maintained.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (571) 272-3164. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Duong
Examiner
Art Unit 2666

November 17, 2004